



Express Mail Label  
Date of Deposit: May 15, 2002

PATENT APPLICATION  
ATTY DOCKET NO.: 15966-546 CON-S22 (CURA 46)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: Fernandes et al.

#7

SERIAL NUMBER: 09/966,545

EXAMINER: Not Yet Assigned

FILING DATE: September 26, 2001

ART UNIT: 1653

TITLE: Novel KIAA1061-like Cell Adhesion Molecule-Like Proteins and Polynucleotides Encoding Them

Commissioner for Patents  
United States Patent and Trademark Office  
Washington, D.C. 20231

**SUPPLEMENTAL PRELIMINARY AMENDMENT AND RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS**

This Response to the January 15, 2002, Notice to Correct Application Papers, is due on or before May 15, 2002, with a two-month extension of time. Prior to examination of the above-identified patent application, please amend the application as set forth below and consider the following remarks.

*In the Specification:*

Delete the previously filed specification, pages 1-109, and insert the enclosed substitute specification, pages 1-96.

In addition, amend the specification as follows:

On page 1, lines 1-2, amend the title as follows:

-- NOVEL [IG SUPERFAMILY CELL SURFACE RECEPTOR-LIKE] KIAA1061-LIKE CELL ADHESION MOLECULE-LIKE PROTEINS AND POLYNUCLEOTIDES ENCODING THEM --.

On page 1, line 6, delete "their entities" and insert -- These applications are incorporated herein by reference in their entities. --

On page 96, lines 2-7, amend the paragraph as follows:

U.S.S.N. 09/966,545  
Filed: September 26, 2001

-- This application is drawn to novel amino acid sequences for mammalian polypeptides that have sequence similarity to human [microfibril-associated glycoprotein 4] cell adhesion molecule KIAA1061, and processes for preparing the same. The clone identified has a nucleic acid sequence that is [1099] 4000 nucleotides long, contains an open reading frame from nucleotides [83-85 to 890-892] 408-410 and 2934-2936, and encodes a novel polypeptide that is [269] 842 amino acids long. --

Insert the enclosed Sequence Listing, pages 1-66, at the end of the specification.

It is understood that the Patent and Trademark Office will make the necessary changes in the enclosed Sequence Listing to update application number and filing date for the instant application.

*Pursuant to 37 CFR §§1.121(b)(1),(3), a clean version of the specification is attached as a substitute specification.*

***In the Claims:***

Kindly amend the claims as follows:

72. (Amended) An isolated nucleic acid comprising any one of the following:

- (a) a nucleic acid sequence encoding a polypeptide of SEQ ID NO: [22] 16;
- (b) a nucleic acid sequence at least 90% identical to the nucleic acid sequence of (a) above;
- (c) a nucleic acid encoding a polypeptide wherein the polypeptide has conservative amino acid substitutions to the polypeptide of SEQ ID NO: [22] 16; or
- (d) a fragment of the nucleic acid sequence of (a) or (b) above wherein the fragment comprises at least 20 nucleotides.

73. The nucleic acid of claim 72, wherein said nucleic acid is selected from the group consisting of DNA and RNA.

74. (Amended) The nucleic acid of claim 72, wherein said nucleic acid comprises an open reading frame that encodes a polypeptide of SEQ ID NO: [22] 16 or its complement, or a mutant or variant thereof.
75. (Amended) The nucleic acid of claim 72, wherein said nucleic acid encodes a polypeptide comprising an amino acid of SEQ ID NO: [22] 16 or its complement.
76. (Amended) The nucleic acid of claim 74 wherein the nucleic acid encodes a mature form of a polypeptide comprising an amino acid sequence that is SEQ ID NO: [22] 16.
77. (Amended) The nucleic acid of claim 75 wherein said nucleic acid encodes a polypeptide comprising an amino acid of SEQ ID NO: [22] 16, a mutant or variant thereof.
78. An oligonucleotide sequence that is complimentary to and hybridizes under stringent conditions with the nucleic acid of claim 72, a variant or mutant thereof.
79. (Amended) The oligonucleotide sequence of claim 78 which is complementary to at least a portion of the nucleotide sequence of SEQ ID NO: [21] 15, its complement, or a mutant or variant thereof.
80. An isolated nucleic acid comprising a nucleotide sequence complementary to at least a portion of a nucleic acid according to claim 74.
81. A vector comprising the nucleic acid of claim 72.
82. A cell comprising the vector of claim 81.
83. (Amended) The cell of claim 82 wherein said cell is a prokaryotic or eukaryotic cell comprising the nucleic acid sequence which is SEQ ID NO: [21] 15, its complement, or a mutant or variant thereof.

84. A pharmaceutical composition comprising the nucleic acid of claim 72 and a pharmaceutically acceptable carrier.
85. (Amended) A process for producing a polypeptide encoded by the nucleic acid of claim 72, said process comprising:
  - a) providing [the] a cell comprising a vector comprising the nucleic acid of claim [82] 72;
  - b) culturing said cell under conditions sufficient to express said polypeptide; and
  - c) recovering said polypeptide,  
thereby producing said polypeptide.
86. The process of claim 85 wherein said cell is a prokaryotic or eukaryotic cell.
87. A process for identifying a compound that binds the nucleic acid of claim 72, the process comprising:
  - a) contacting said nucleic acid with a compound; and
  - b) determining whether said compound binds said nucleic acid sequence.
88. The compound identified by the process of claim 87.

*Pursuant to 37 CFR §§1.121(c), a clean version of the claims is attached as pages 94-95 in the substitute specification.*

#### **REMARKS**

Upon entry of the above amendments, claims 72-88 will be pending. Amendments to the title, claims 72, 74-77, 79 and 83 and to the abstract on page 96 are supported at least, e.g., in the specification as originally filed at page 14, lines 4-19. Claims 85 was amended to remove multiple dependency, and is supported by claims 81 and 82 as filed.

U.S.S.N. 09/966,545  
Filed: September 26, 2001

The attached substitute specification is reformatted to correct margins, reprinted on A4 paper, and modified to incorporate all changes listed in the Preliminary Amendment filed on September 26, 2001, which was attached to the Request for Filing a Continuing Patent Application Under 37 C.F.R. § 1.53(b). In addition, the above requested amendments have been incorporated into the attached substitute specification. A Statement in Support of

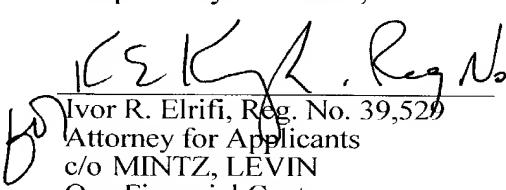
As requested in the Notice to File Corrected Application Papers, Applicants submit herewith a true paper copy of the Sequence Listing filed in the parent patent application U.S.S.N. 09/544,511, filed April 6, 2000 from which the instant application claims priority. In addition, Applicants enclose a statement that the content of the Sequence Listing information recorded in computer readable form, filed in the parent patent application and incorporated into the instant application pursuant to 37 C.F.R. 1.821(e), is identical to the enclosed written sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

### CONCLUSION

Applicants respectfully submit that the present application complies with 37 C.F.R. §§ 1.821-1.825. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

Dated: May 15, 2002

  
Ivor R. Elrifi, Reg. No. 39,529  
Attorney for Applicants  
c/o MINTZ, LEVIN  
One Financial Center  
Boston, Massachusetts 02111  
Tel: (617) 542-6000  
Fax: (617) 542-2241

TRA 1665947v1